## Workforce Education & Training Strategic Planning Project

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# **IOU Role in Energy Efficiency**

- IOUs implement most of CA's EE incentive programs
- Funded by ratepayers, regulated by CPUC
- 1.5 billion a year including EE, other demand-side programs and low income EE
- \$30 million per year in training funds



# **Purpose of Contract**

- EE Strategic Plan
- Needs Assessment
- IOU Implementation of Recommendations
- CPUC direction in guidance decision in 13-14
- Stakeholder concerns
- CPUC final decision: RFP for expert entity



## **Our Approach**

- Understand the current state of workforce programming (both WE&T and incentive side)
  - What parts of Needs Assessment were implemented?
  - Why or why not?
- Develop specific recommendations for action bridge from Needs Assessment
- Get stakeholder feedback
- Create recommendations and concrete action plan



### **Comprehensive Approach to WE&T**

#### Goals:

- Primary Goal: Energy savings
- Secondary Goal: Good careers for Californians, better opportunities and outcomes for low-income, disadvantaged and minority workers

#### Roles:

- Big role in EE industry (> \$1 billion)
- Small role in WE&T (\$30 million)

## **Framework**

WE&T Goals			
Energy Savings	Inclusion		
How can WE&T resources best contribute to EE skills development in key occupations?	How can WE&T resources best contribute to preparation of disadvantaged workers for EE-related careers?	Workforce Education & Training programs (Supply of labor)	IO U Ro les
How can EE programs support workers to do high-quality work?	How can IOU investments lead to good jobs with opportunities for disadvantaged workers?	EE/DSM incentive/rebate programs (Demand for labor)	

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# How to integrate WE&T and EE resource programs?

 Is there a greater need for addressing work quality in ratepayer subsidized EE programs?

 What types of workforce interventions could most effectively improve work quality for different types of programs?



# **Work Quality**

- proper installation, commissioning and maintenance of equipment
- design, construction, and retrofits consistent with best practices and technical specifications
- safe, effective, and reliable workmanship.



# Is there a greater need for addressing work quality in ratepayer subsidized energy efficiency programs?

# IOUs are neither rewarded for high quality work nor penalized for low quality work

Savings claims based on assumptions that don't account for workforce competencies

Inspections of installed equipment not based on technical specs

No documentation of competency requirements

Work Quality

No data collection or evaluations specific to work quality





# What types of workforce interventions could most effectively improve work quality for different types of programs?



# Upfront workforce standards to improve work quality

Contractor
PreQualification

Contractor Requirements

Work Quality

Worker Skill Standards or Certifications





# **Contractor Requirements**

#### **VERIFY**

- Applicable licenses, bonding and insurance (including workers' compensation)
- Wage and labor law compliance
- No OSHA violations
- Applicable permits including code inspections

Tier I:
All Customer
Projects

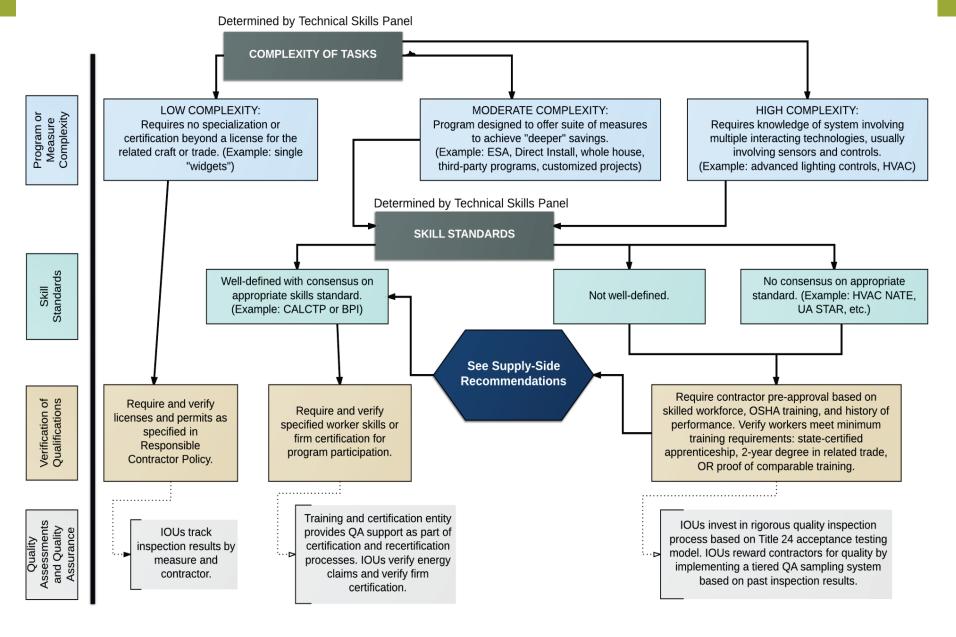
Tier II:
Projects ≥
\$100K;
Contracts ≥
\$1 million

PRE-QUALIFY

- History of performance
- Evidence of skilled
- workforce
- OSHA Training









# **Skill Standards Recommendations**

- CALCTP for advanced lighting control systems
- Graduation from state-certified apprenticeship program, 2-year degree in HVAC, or proof of comparable training and experience plus contractor pre-qual for HVAC QI/QM
- BPI firm accreditation or BPI Building Analyst plus graduation from state-certified apprenticeship program, 2-year degree, or proof of comparable training in HVAC and/or insulation plus contractor pre-qual for Whole House
- Use DOE/NREL skill standard guidance to determine future skill standards for other programs

### **Skill Certifications**

#### **Examples of skill certification requirements**

Third Party Certification	Current Use in CA
California Advanced Lighting Control Training Program	CEC Title 24 Acceptance Testing
Building Performance Institute (BPI) Building Analyst	Energy Upgrade CA
CalCERTS – Independent Whole House Rater	Energy Upgrade CA
Building Operator Certification (BOC) + 10 years experience	San Francisco Building Energy Disclosure Ordinance
ASHRAE BEAP + 2 years experience	San Francisco Building Energy Disclosure Ordinance
CA Apprenticeship Certification	CA Public Works

# **Costs and Benefits of Standards**

The most rigorous studies measure the costs and benefits of standards *after* they are instituted, for comparison with a control group.

Without data on work quality, it is impossible to calculate the work quality benefits of standards or the costs of delayed adoption

It is impractical to calculate the costs and benefits of workforce standards *prior* to adoption.

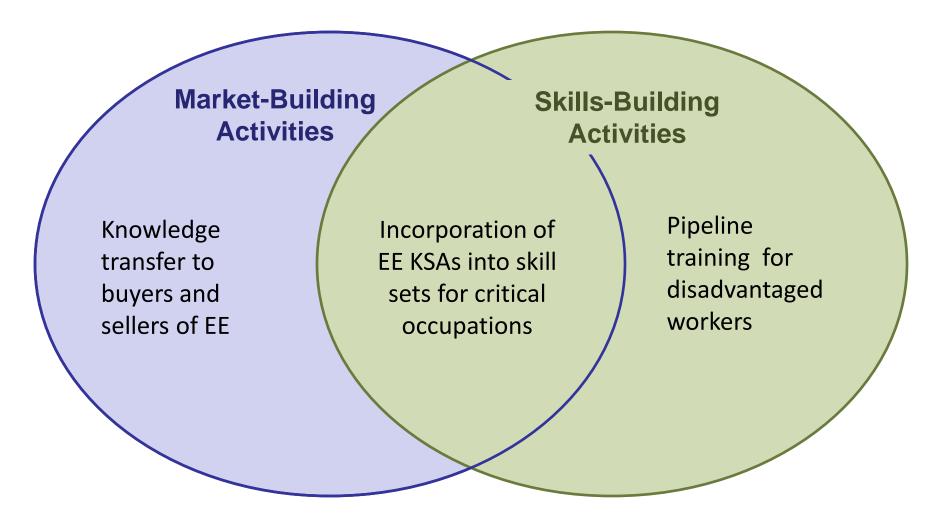


## **Framework**

	WE&T Goals	
	Inclusion	Energy Savings
Workforce Education & Training programs (Supply of labor)  EE/DSM	How can WE&T resources best contribute to preparation of disadvantaged workers for EE-related careers?	How can WE&T resources best contribute to EE skills development in key occupations?
EE/DSM incentive/rebate programs (Demand for labor)	How can IOU investments lead to good jobs with opportunities for disadvantaged workers?	How can EE programs support workers to do high-quality work?



### **ENERGY GOALS WORKFORCE GOALS**





### **Recommendation:**

Create a dedicated skills-building portfolio, with distinct goals, programmatic activities, and a separate budget from market-building offerings

- 1. Implement skills-building portfolio via two RFPs: one for energy savings and one for inclusion
- 2. Adopt a clear priority-setting process
- 3. Engage a Peer Review Group to advise on RFP development and program implementation



### **Workforce Institutions for EE Pathways**

**Entry-Level** 

High School

K-8

Entry-Level Inclusion:

Community College Bridge programs; CBOs; pre-apprenticeships Core Post-Secondary Education

Degrees from accredited 4-year architecture and engineering schools; professional licenses

Journey cards from

certified apprenticeship;

certificates/degrees from

community colleges

Incumbent Worker Skills Upgrade

Continuing education required to maintain license or professional membership

Some industry-required certifications;

journey upgrade classes

Community college programs in the residential trades

Some industry-required certificates; community college classes

Professional Occupations

Non-residential Trades

Residential Trades

# What's missing now?

- Class design for skills-building
- Alignment with pathways
- Leveraging CA WFD resources
- Employer commitment in new sector strategies
- Clear process for prioritizing investments
- Strategy for inclusion
- Input from experts and oversight



### **Recommendation: Skills-Building RFPs**

**Entry-Level Inclusion RFP** 

**Energy Savings RFPs** 

- Sector strategies to train and place disadvantaged workers in living wage, career track EE jobs.
- EE career awareness and preparation for 9-12

Core Post-Secondary Education:

### Support for Core Institutions

- Curriculum development and piloting
- •Training of instructors

Incumbent Worker Skills Upgrade:

# Sector Strategies with Employer Commitment

- Curriculum and certification development
- •Training of instructors
- •Pilot training of incumbent workers

Professional Occupations

Non-residential

Residential Trados

### Role of a Peer Review Group

- Participate in the design of the RFPs (e.g. guiding principles and criteria for project selection)
- Provide input on metrics of success
- Participate in the review committees
- Advise IOUs on the selection of staff or technical consultants to administer the RFPs
- Provide ongoing input and feedback throughout program implementation
- Offer feedback on program effectiveness upon completion



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How can EE programs support workers to do high-quality work?	How can IOU investments lead to good jobs with opportunities for disadvantaged workers?	EE/DSM incentive/rebate programs (Demand for labor)	<b>Roles</b>

### **Inclusion**

### Issues:

- Training and workforce development (covered in RFP proposal)
- Job access into the good jobs
- Ensure no ratepayer jobs are poverty level jobs



### **Policies**

- Public sector targeted hire and apprenticeship model for MUSH customers
- Wage floors for contractors with direct IOU relationship; automated jobs reporting

### Recommendations

- Add workforce inclusion as a factor in proposals
- Adopt First Source language
- Establish prevailing wages and targeted hire for all contractors with a direct contracting relationship (e.g. ESAP etc)
- Guide and encourage gov't and institutional partnerships and others serving MUSH to adopt a public sector targeted hire model.



### **Foundational Activities for Inclusion**

- 1. Adopt a definition of "Disadvantaged Worker," based on both residence in a high unemployment zip code and meeting specific criteria of disadvantage
- 2. On-going data collection on job quality, workforce diversity, and hiring of disadvantaged workers, to create a baseline and measure progress over time
  - a) Require contractors in directly contracted programs to use an electronic certified payroll reporting system for reporting hiring data



### **Evaluation**

- Metrics for recommendations
- Data collection
- Evaluation of the costs and benefits of standards



# **Policy for CPUC and others**

- CPUC should direct IOUs to implement Plan
- CPUC should articulate goals and strategies on inclusion
- CEC should convene workforce steering committee

